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**CONS. QUEBEC SMELTING & REFINING LTD.**

(NO PERSONAL LIABILITY)

*Full B*

**ANNUAL  
REPORT**

**1965**

**CONS.  
QUEBEC SMELTING &  
REFINING LTD.**

(NO PERSONAL LIABILITY)

**MAGNETISM**

**PROCESSING**

**FERRO-  
MAGNETICS  
LTD.**

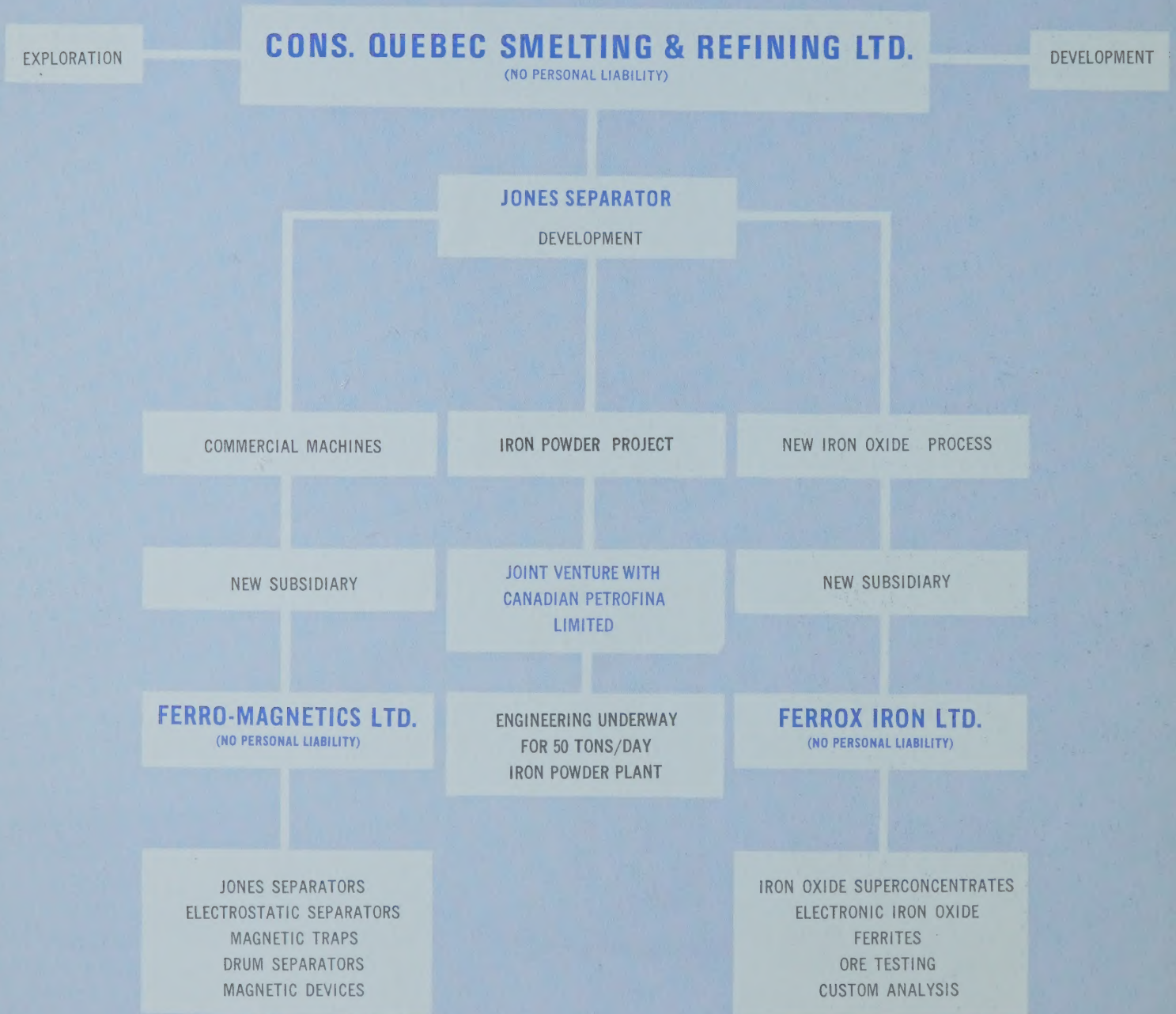
(NO PERSONAL LIABILITY)

**FERROX  
IRON  
LTD.**

(NO PERSONAL LIABILITY)



# 1965 YEAR OF ACHIEVEMENT



## HEAD OFFICE

Suite 400,  
621 Craig Street West,  
Montreal 3, P.Q.

## TRANSFER AGENTS AND REGISTRARS

Eastern & Chartered Trust Company,  
625 Dorchester Blvd. W.,  
Montreal 2, P.Q.

1901 Yonge St.,  
Toronto 1, Ontario

## BANKERS

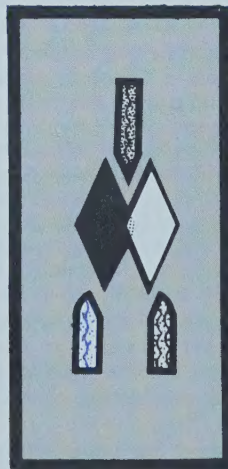
Canadian Imperial Bank of Commerce,  
265 St. James Street West,  
Montreal 1, P.Q.

## SHARES LISTED

Canadian Stock Exchange - Montreal, Que.

# CONS. QUEBEC SMELTING & REFINING LTD.

(NO PERSONAL LIABILITY)



Highlights .....	Inside Front Cover
Letter to Shareholders .....	4
Financial Data .....	6
The Year in Review .....	10
Directors, Officers .....	Back Cover





*R. P. Mills*

## *To the Shareholders*

Progress this year, while not spectacular, has been steady and continuous. Production of ferrite powder started in October, markets are being developed and the project should begin to show substantial profits this year. An agreement was reached with Canadian Petrofina Limited on a joint venture to produce iron powder and the first phase of this program has been completed. More than 300 inquiries were received on the Jones Wet Magnetic Separator as a result of the manufacturing and sales agreement with Stearns-Roger Corporation. A number of test programs on various ores were successfully completed and several orders for separators are in hand and a number of others are pending.

The outlook for the coming year is most encouraging.

### **Ferrox Iron Ltd.**

Production of superconcentrates of iron oxide at the plant of your subsidiary, Ferrox Iron Ltd. was started early in the year. Ferrox received a total of \$26,293 from the sale of superconcentrates. It was then decided to discontinue the sale of superconcentrates and to use this material for the production of ferrite powder and for the pilot plant for producing iron powder.

Additional equipment, including calcine furnace, grinding units and other machinery was installed and the first production of ferrite powder was obtained in October. A large and profitable market for this material is available both in the United States and in Europe. Samples have been submitted to consumers on a world-wide basis, a number of small orders have been received from companies in the United States, as well as from England, Germany and Italy. In most cases, after trial, the product has been acceptable and some larger orders are now being booked.

Our main effort will now be devoted to market penetration of this product and to accumulate sufficient orders and customers to warrant the construction of a plant with a capacity of from six to ten tons per day of ferrite powder and ferrite products.



## Canadian Petrofina Limited

An agreement was concluded with Canadian Petrofina Limited for a joint undertaking for a pilot plant operation to prove out the process for producing iron powder from super-concentrates being manufactured by our subsidiary, Ferrox Iron Ltd., at Prescott, Ontario. Under the terms of the agreement Canadian Petrofina will advance up to \$75,000 for the pilot plant and test work to produce and evaluate the iron powder and the necessary investigation and engineering for a plant to produce 50 tons per day of iron powder.

The first stage is practically completed and engineering studies are now being started on the design and cost of a plant to be located at the Canadian Petrofina refinery in Montreal East where a source of hydrogen, to be supplied by Petrofina, is available.

If we go ahead with the construction of a plant with a capacity of 50 tons per day, Petrofina will supply 51% of the financing and Cons. Quebec Smelting & Refining 49%, and each company will be entitled to maintain their percentage interest in the venture.

## Income

The income received by your company during the year came from advance royalties from Stearns-Roger Corporation for the Jones Wet Magnetic Separator, and from a number of test programs to evaluate the use of the Jones Separator on bauxite, on iron ores and a number of other products.

A total of \$470,412 has been spent on the facilities of Ferrox Iron Ltd. at Prescott, Ontario, of which \$202,617 represents land, buildings, machinery and equipment and \$267,805 on research and development, including administrative expenses. Of this amount \$224,247 has come from Government grants, of which \$78,459 was for buildings, machinery and equipment and \$145,787 for research and development. The balance of the funds has been provided through your company.

## Capitalization

The capitalization of your company now consists of 2,500,000 shares of a par value of \$5.00 each, of which 1,190,200 are issued and outstanding, leaving 1,309,800 in the treasury available for financing and future expansion.

Your Directors have recently authorized an issue of \$500,000 of 7% Convertible Debentures. These are convertible at \$1.00 per share on or before February 1, 1968, at \$1.50 per share in 1969, \$2.00 per share in 1970 and advances to \$2.50 per share by February 1, 1971. To date \$100,000 of the Debentures have been issued at par. Your company has adequate funds on hand for its present requirements.

## Mining Properties

The company's mining properties consist of 50 claims in McKenzie and Roy townships, Chibougamau, the base metal properties in New Brunswick which adjoin those of Brunswick Mining and Smelting and claims in Frotet Lake in Quebec. A test and research program, using the Jones Wet Magnetic Separator is planned on the phosphate mines near Buckingham, Quebec, to upgrade these ores. These include the High Rock, Cap Rock, Little Union and Big Union phosphate properties.

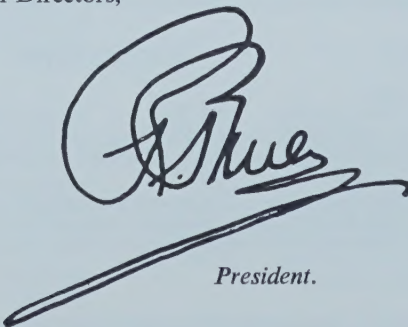
Your Directors wish to express their sincere appreciation to Dr. J. H. Morgan, your Vice-President, Mr. W. J. D. Stone, Managing Director of Ferrox Iron and Ferro-Magnetics, to Mr. P. D. R. Maltby, Manager of the Ferrox plant at Prescott and to the staff for their loyal service throughout the year.

## Annual Meeting

Your Directors submit for your consideration the Balance Sheet as at December 31, 1965, together with Statement of Development Expenditures, Administrative Expenditures and related statements as examined by Price Waterhouse & Co., Auditors for the company. In addition, there is included Balance Sheet of Ferrox Iron Ltd. and Ferro-Magnetics Ltd. as at December 31, 1965, together with Statement of Development and Administrative Expenditures and of Research Expenditures to December 31, 1965.

Annual Meeting of Shareholders will be held at the Windsor Hotel, Montreal, Quebec, on the 6th day of May, 1966. Notice of the Meeting and Proxy form in case you cannot attend in person are included with the report.

Respectfully submitted on behalf of the Board of Directors,



President.

Montreal, Quebec.  
April 4, 1966.



# CONS. QUEBEC SMELTING & REFINING LTD.

(NO PERSONAL LIABILITY)

(Formerly Quebec Smelting & Refining Limited (No Personal Liability)  
Incorporated under the Quebec Mining Companies Act on November 26, 1947)

Statement I

## BALANCE SHEET—DECEMBER 31, 1965

### ASSETS

<b>CURRENT ASSETS:</b>		
Cash on hand and in bank.....	\$	9,304.93
Accounts receivable.....		497.19
Investments in listed mining shares (Note 1 and Schedule A—quoted market value \$49,286.00).....		67,535.44
	\$	77,337.56
<b>INVESTMENTS IN SHARES OF UNLISTED MINING COMPANIES</b> (Note 1 and Schedule B).....		112,018.46
<b>INVESTMENT IN AND ADVANCES TO FERROX IRON LTD. (N.P.L.),</b> a subsidiary company:		
Investment in 275,000 shares, at cost.....	\$	137,500.00
Advances.....		73,369.26
		210,869.26
<b>ADVANCES TO RELATED COMPANIES.....</b>		12,500.00
<b>MORTGAGE RECEIVABLE, less instalments due within one year.....</b>		22,519.49
<b>MINING CLAIMS UNDER DEVELOPMENT LICENCES, MINING LICENCES,</b> <b>OR PROSPECTOR'S LICENCES (Notes 1 and 2).....</b>		58,419.33
<b>OPTION ON MINING RIGHTS,</b> Portland West Township phosphate properties (Note 3).....		46,591.87
		105,011.20
<b>FIXED ASSETS, at cost:</b>		
Machinery and equipment.....		11,474.96
Less: Accumulated depreciation.....		9,653.32
		1,821.64
<b>INVESTMENT IN JONES WET MAGNETIC SEPARATOR.....</b>		6,222.07
<b>DEFERRED EXPENDITURES:</b>		
Development (Statement II).....	\$	409,515.45
Administrative (Statement III).....		141,736.09
		551,251.54
<b>ORGANIZATION EXPENSES.....</b>		4,722.90
		<u>\$ 1,104,274.12</u>

### LIABILITIES AND CAPITAL

<b>CURRENT LIABILITIES:</b>		
6% Demand loan (secured).....	\$	35,000.00
Accounts payable and accrued liabilities.....		567.90
Advances from related companies.....		
		\$ 35,567.90
<b>CAPITAL:</b>		
Capital stock (Notes 4 and 5)—		
Authorized—		
2,500,000 shares of \$5 par value.....		\$12,500,000.00
Issued and fully paid—		
	<i>Shares</i>	<i>(Discount)</i>
For cash.....	890,200	(\$ 3,128,742.55)
For net assets of predecessor corporation.....	300,000	(750,000.00)
	<u>1,190,200</u>	<u>(\$ 3,878,742.55)</u>
		2,072,257.45
<b>Deduct: Cost of mining claims and options abandoned, write-offs and net losses realized on disposal of investments and other assets</b> (Statement IV).....		1,018,051.23
		<u>1,054,206.22</u>
<b>SIGNED ON BEHALF OF THE BOARD:</b>		
R. P. MILLS, <i>Director.</i>		
J. O. SABOURIN, <i>Director.</i>		
		<u>\$ 1,104,274.12</u>

### NOTES TO FINANCIAL STATEMENTS—DECEMBER 31, 1965

- The investments in shares of mining companies and the mining rights are valued at cost, except in the case of the shares and mining rights acquired from Quebec Smelting & Refining Corporation in 1948 and where shares were received in consideration of sales of mining rights, which are at valuations determined by the Board of Directors.
- The amount at which the mining rights are recorded does not, and does not purport to, represent their present or future value.
- The mining rights under option may be acquired by the issue to the vendors of 75,000 shares of a company having an authorized capital of 3,000,000 shares if such is formed to acquire and develop them.
- On April 8, 1965, 389 shares of capital stock were sold for \$97.25 cash.
- The Company was granted supplementary letters patent on May 3, 1965 whereunder:
  - The shares of the company were consolidated into 1,200,000 shares of the par value of \$5.
  - The capital of the company was increased by the creation of 1,300,000 additional shares of the par value of \$5.
- Pursuant to a resolution of the Board of Directors on February 10, 1966, \$500,000 in aggregate principal amount of 7% convertible debentures were created. The debentures are dated February 1, 1966, are redeemable at any time after February 1, 1968, and mature on February 1, 1971. They constitute a first floating charge to and in favour of the Trustee on the undertaking of the Company, its property and assets. The debentures are convertible at the option of the holder into fully paid and non-assessable common shares of the Company at the following rates for each \$100 principal amount:
  - On or before February 1, 1968 —100 Common shares
  - February 2, 1968 to February 1, 1969—66% Common shares
  - February 2, 1969 to February 1, 1970—50 Common shares
  - February 2, 1970 to February 1, 1971—40 Common shares
 On February 10, 1966, \$100,000 of the debentures were issued at par.
- The Company is the guarantor of a \$41,625 mortgage loan made to Ferroxx Iron Ltd. (No Personal Liability), a subsidiary company.

### AUDITORS' REPORT

To the Shareholders of  
CONS. QUEBEC SMELTING & REFINING LTD.  
(No Personal Liability):

We have examined the balance sheet of Cons. Quebec Smelting & Refining Ltd. (No Personal Liability) as at December 31, 1965 and have obtained all the information and explanations we have required. Our examination included a general review of the accounting procedures and such tests of accounting records and other supporting evidence as we considered necessary in the circumstances.

In our opinion, and according to the best of our information and the explanations given to us and as shown by the books of the company, the accompanying balance sheet of Cons. Quebec Smelting & Refining Ltd. (No Personal Liability), is properly drawn up so as to exhibit a true and correct view of the state of the affairs of the company as at December 31, 1965 and of its operations for the year ended on that date, in accordance with generally accepted accounting principles applied on a basis consistent with that of the preceding year.

March 24, 1966.

PRICE WATERHOUSE & CO.  
Chartered Accountants.



# CONS. QUEBEC SMELTING & REFINING LTD.

(NO PERSONAL LIABILITY)

Statement II

## DEVELOPMENT EXPENDITURES FROM DATE OF INCORPORATION (NOVEMBER 26, 1947) TO DECEMBER 31, 1965

### BY AREAS

	Balance at December 31, 1964	Expenditures for the year ended December 31, 1965	Costs applicable to mining claims abandoned	Balance at December 31, 1965
<b>Current groups:</b>				
McKenzie, Lesperance and Roy Townships...	\$123,594.20	\$2,145.30	\$35,490.00	\$ 90,249.50
New Brunswick.....	178,192.69	1,119.50	—	179,312.19
New Quebec-township 1931.....	386.75	880.00	—	1,266.75
Participation in prospect- ing ventures.....	4,268.90	—	—	4,268.90
Phosphate properties				
Portland West				
Township.....	120,646.06	896.21	—	121,542.27
Urban Township.....	3,741.30	850.45	—	4,591.75
Miscellaneous-prospect- ing.....	3,119.36	835.73	—	3,955.09
	<u>433,949.26</u>	<u>\$6,727.19</u>	<u>\$35,490.00</u>	<u>\$405,186.45</u>
<b>Depreciation of building and equipment-un- allocated.....</b>	<b>4,215.84</b>	<b>113.16</b>	<b>—</b>	<b>4,329.00</b>
<b>Total per balance sheet— Statement I.....</b>	<b>\$438,165.10</b>	<b>\$6,840.35</b>	<b>\$35,490.00</b>	<b>\$409,515.45</b>

### BY DEVELOPMENT EXPENDITURE ACCOUNTS

	Balance at December 31, 1964	Expenditures for the year ended December 31, 1965	Balance at December 31, 1965
Assays.....	\$ 9,539.59	\$ 9.50	\$ 9,549.09
Commissary.....	34,377.99	—	34,377.99
Depreciation of buildings and equip- ment.....	42,866.59	113.16	42,979.75
Diamond drilling.....	296,360.64	—	296,360.64
Engineering.....	10,712.93	4,200.00	14,912.93
Equipment and maintenance.....	11,193.97	—	11,193.97
Geological and engineering salaries..	5,639.73	—	5,639.73
Geophysical and land surveys.....	54,805.37	—	54,805.37
Insurance.....	8,963.35	191.00	9,154.35
Miscellaneous.....	10,703.90	494.27	11,198.17
Participation in prospecting ventures..	4,268.90	—	4,268.90
Prospecting.....	10,011.35	—	10,011.35
Salaries and wages.....	166,365.69	—	166,365.69
Supplies.....	29,077.17	(263.91)	28,813.26
Taxes, fees and licenses.....	47,293.06	1,384.93	48,677.99
Transportation.....	35,755.33	262.72	36,018.05
Unemployment insurance.....	1,710.36	—	1,710.36
Workmen's compensation insurance..	11,164.53	448.68	11,613.21
	<u>\$790,810.45</u>	<u>\$6,840.35</u>	<u>\$797,650.80</u>
Development expenditures on mining claims and options abandoned....	(352,645.35)	(35,490.00)	(388,135.35)
<b>Total per balance sheet—Statement I..</b>	<b>\$438,165.10</b>	<b>\$(28,649.65)</b>	<b>\$409,515.45</b>

### Statement III

#### ADMINISTRATIVE EXPENDITURES FROM DATE OF INCORPORATION (NOVEMBER 26, 1947) TO DECEMBER 31, 1965

	Balance at December 31, 1964	Expenditures for the year ended December 31, 1965	Balance at December 31, 1965
Advertising.....	\$ 3,888.61	\$ 348.08	\$ 4,236.69
Cost of share certificates.....	3,209.14	404.96	3,614.10
Depreciation of office furniture.....	7,069.18	418.98	7,488.16
Legal and audit fees.....	15,147.13	837.75	15,984.88
Listing and stock exchange fees.....	3,278.25	410.10	3,688.35
Management services—geological, engineering and administrative.....	69,000.00	3,600.00	72,600.00
Miscellaneous office expenses.....	9,990.22	2,917.42	12,907.64
Office rent.....	9,906.21	—	9,906.21
Office salaries.....	51,919.19	—	51,919.19
Printing and maps.....	10,596.98	437.78	11,034.76
Publicity and shareholders information..	5,047.90	4,568.11	9,616.01
Securities registration fees and expenses.	3,275.34	—	3,275.34
Stationery, postage and office supplies..	5,683.65	931.98	6,615.63
Taxes, fees and licences.....	3,496.38	104.93	3,601.31
Telephone and telegrams.....	6,186.88	72.85	6,259.73
Transfer agent's fees.....	25,021.68	5,981.62	31,003.30
Travelling.....	4,019.20	298.18	4,317.38
Workmen's compensation insurance....	1,773.97	—	1,773.97
Interest and dividends received.....	(4,662.78)	(1,395.12)	(6,057.90)
	<u>\$233,847.13</u>	<u>\$ 19,937.62</u>	<u>\$253,784.75</u>

Less:

Cost applicable to mining claims abandoned.....	\$ 76,254.86	\$ 13,798.40	\$ 90,053.26
Excess of revenue over expenditure from Jones Wet Magnetic Separator Operations (including 1964 balance of \$5,999.50).....	—	21,995.40	21,995.40
	<u>\$ 76,254.86</u>	<u>\$ 35,793.80</u>	<u>\$112,048.66</u>
<b>Total per balance sheet— Statement I.....</b>	<b>\$157,592.27</b>	<b>\$(15,856.18)</b>	<b>\$141,736.09</b>

### Statement IV

#### STATEMENT OF COST OF MINING CLAIMS AND OPTIONS ABANDONED, WRITE-OFFS AND NET LOSSES REALIZED ON DISPOSALS OF INVESTMENTS AND OTHER ASSETS AS AT DECEMBER 31, 1965

	From incorporation to December 31, 1964	For the year ended December 31, 1965	From incorporation to December 31, 1965
Net loss (profit) on disposal of invest- ments in shares of mining companies..	\$285,204.26	\$ (6,131.76)	\$279,072.50
Write-down of investments (Senvil Mines Limited).....	22,933.08	—	22,933.08
Profit on disposals of fixed assets.....	(16,031.04)	—	(16,031.04)
Cost of mining claims and options abandoned—			
Mining claims.....	253,721.80	166.28	253,888.08
Development expenditures.....	352,645.35	35,490.00	388,135.35
Administrative expenditures.....	76,254.86	13,798.40	90,053.26
<b>Total per balance sheet— Statement I.....</b>	<b>\$974,728.31</b>	<b>\$43,322.92</b>	<b>\$1,018,051.23</b>

#### INVESTMENTS IN LISTED SHARES OF MINING COMPANIES

NUMBER OF SHARES		Book value	Market value
40,000	Baker Talc.....	\$15,216.64	\$ 2,800.00
26,000	Chib-Kayrand Copper Mines.....	4,669.80	4,420.00
73,800	Merrill Island Mining.....	47,649.00	42,066.00
	<b>Total per balance sheet—Statement I</b>	<b>\$67,535.44</b>	<b>\$49,286.00</b>

### Schedule A

#### INVESTMENTS IN UNLISTED SHARES OF MINING COMPANIES

		Book value
270,000	Chiboug Copper Corporation (pooled).....	\$ 13,500.00
129,200	Cuvier Mines.....	13,665.64
562	Gibson Mines.....	100.67
24,188	Gibson Mines (pooled).....	483.76
75,000	Grand Manitou Mines (pooled).....	7,500.00
357,029	Lucky Lake Mines.....	42,423.73
256,669	Lucky Lake Mines (pooled).....	6,863.14
200,000	Packard Pershing Mines (pooled).....	20,000.00
100,000	Ran-Lux Mines (pooled).....	5,125.00
4,000	Scott Chibougamaui Mines.....	2,356.52
Total per balance sheet—Statement I.....		\$112,018.46

### Schedule B



(NO PERSONAL LIABILITY)

### Statement I

## ASSETS

CURRENT ASSETS		
Accounts receivable.....	\$ 12,346.74	
Inventory—raw materials, at cost.....	23,196.87	\$ 35,543.61
FIXED ASSETS, AT COST:		
Land .....	1,050.00	
Building.....	56,462.24	
Machinery and equipment.....	144,605.77	
Furniture and fixtures.....	499.71	
	<u>202,617.72</u>	
Less: Received by grant on building, machinery and equipment (Note).....	78,459.36	124,158.36
DEFERRED EXPENDITURES		
Development (Statement II).....	247,605.23	
Administrative (Statement II).....	20,199.79	
	<u>267,805.02</u>	
Less: Received by grant (Note).....	145,787.68	122,017.34
ORGANIZATION EXPENSES.....		<u>2,820.07</u>
		\$284,539.38

Bank overdraft.....				\$ 4,282.53
6% Demand loan.....				7,500.00
Accounts payable.....				6,252.59
				<hr/> 18,035.12
Advances from related companies:				
Cons. Quebec Smelting & Refining Ltd.				
(N.P.L.), parent company.....			\$ 73,369.26	
Other.....			6,000.00	79,369.26
			<hr/>	<hr/>
7% Mortgage payable (secured), less instalments				
due within one year.....				37,125.00
CAPITAL:				
Capital stock—				
Authorized—1,000,000 shares of \$1 par value.....			\$1,000,000.00	
			<hr/>	<hr/>
Issued and fully paid—				
	<i>Shares</i>	<i>Discount</i>	<i>Net</i>	
For cash.....	200,010	\$100,000.00	\$100,010.00	
For net fixed assets				
and development				
of ferrite process.....	100,000	50,000.00	50,000.00	
	<u>300,010</u>	<u>\$150,000.00</u>	<hr/>	<hr/>
				150,010.00
				<hr/>
				\$284,539.38

R. P. MILLS, *Director*.  
J. O. SABOURIN, *Director*.

PRICE WATERHOUSE & CO.  
*Chartered Accountants.*

### Schedule A

	Balance at December 31, 1964	Expenditures for the year ended December 31, 1965	Balance at December 31, 1965
Insurance . . . . .	\$ 692.34	\$ 1,331.22	\$ 2,023.56
Light, heat, and power . . . . .	589.29	5,799.49	6,388.78
Materials and supplies . . . . .	16,121.92	25,601.74	41,723.66
Miscellaneous . . . . .	249.77	1,544.82	1,794.59
Rental of equipment . . . . .	375.48	805.14	1,180.62
Salaries and wages . . . . .	27,572.25	71,856.67	99,428.92
Taxes, fees and licences . . . . .		3,493.94	3,493.94
Transportation . . . . .	175.89	3,249.30	3,425.19
Travelling . . . . .		3,796.57	3,796.57
Workmen's compensation insurance . . . . .	744.90	1,211.41	1,956.31
Total per Statement II . . . . .	\$46,521.84	\$118,690.30	\$165,212.14

SOURCE:		
Issue of capital stock.....		\$100,010.00
Government of Canada research and production grants.....		224,247.04
Advances from related companies:		
Cons. Quebec Smelting & Refining Ltd. (N.P.L.), parent company.....	\$ 73,369.26	
Other.....	<u>6,000.00</u>	79,369.26
7% Mortgage loan.....		37,125.00
Sale of super concentrates.....		26,293.09
		<u>\$467,044.39</u>

Fixed assets.....	\$202,617.72	
Less: Acquired from Cons. Quebec Smelting & Refining Ltd. in partial consideration of 100,000 shares of capital stock.....	<u>2,681.09</u>	\$199,936.63
Deferred expenditures:		
Development.....	\$273,898.32	
Less: Acquired from Cons. Quebec Smelting & Refining Ltd. in partial consideration of 100,000 shares of capital stock.....	<u>47,318.91</u>	
	\$226,579.41	
Administrative.....	<u>20,199.79</u>	246,779.20
Organization expenses.....		2,820.07
Excess of current assets over current liabilities....		<u>17,508.49</u>
		\$467,044.39

ADMINISTRATIVE			
Accounting and administrative fixed service charges.....	\$ 5,400.00	\$ 6,000.00	\$ 11,400.00
Consulting fees.....	227.00	—	227.00
Cost of share certificates.....	238.85	—	238.85
Hospital and Pension plans.....	—	975.17	975.17
Interest.....	—	3,282.06	3,282.06
Legal and audit fees.....	12.00	1,487.10	1,499.10
Miscellaneous office expenses.....	64.40	3.30	67.70
Publicity.....	69.01	1,163.11	1,232.12
Stationery, postage and office supplies	257.07	221.30	478.37
Taxes, fees and licences.....	117.50	450.00	567.50
Transfer agent's fees.....	104.20	127.72	231.92
	<u>\$ 6,490.03</u>	<u>\$ 13,709.76</u>	<u>\$ 20,199.79</u>



# FERRO-MAGNETICS LTD.

(NO PERSONAL LIABILITY)  
(Incorporated under the Quebec Mining Companies Act on December 12, 1964)

Statement I

## BALANCE SHEET—DECEMBER 31, 1965

### ASSETS

<b>CURRENT ASSETS:</b>	
Cash in bank.....	\$ 487.01
Accounts receivable—	
Cons. Quebec Smelting & Refining Ltd. (N.P.L.)	\$4,500.00
Other.....	<u>3,101.56</u>
	7,601.56
	8,088.57
<b>ORGANIZATION EXPENSE.....</b>	<b>1,000.00</b>
	<u><u>\$ 9,088.57</u></u>

### LIABILITIES AND CAPITAL

Accounts payable and accrued liabilities.....		\$11,800.00
<b>CAPITAL:</b>		
Capital stock—		
Authorized—40,000 common shares of \$1.00		
par value		
Issued and fully paid		
10 shares.....	\$ 10.00	
Deficit (Statement II)	<u>(2,721.43)</u>	<u>(2,711.43)</u>
		<u><u>\$ 9,088.57</u></u>

SIGNED ON BEHALF OF THE BOARD:

R. P. MILLS, *Director.*

J. O. SABOURIN, *Director.*

### AUDITORS' REPORT

To the Shareholders of

FERRO-MAGNETICS LTD.

(No Personal Liability):

We have examined the balance sheet of Ferro-Magnetics Ltd. (No Personal Liability) as at December 31, 1965 and the statement of income and deficit for the year ended on that date and have obtained all the information and explanations we have required. Our examination included a general review of the accounting procedures and such tests of accounting records and other supporting evidence as we considered necessary in the circumstances.

In our opinion, and according to the best of our information and the explanations given to us and as shown by the books of the company, the accompanying balance sheet and statement of income and deficit are properly drawn up so as to exhibit a true and correct view of the state of the affairs of the company as at December 31, 1965 and the results of its operations for the year ended on that date, in accordance with generally accepted accounting principles.

March 28, 1966.

PRICE WATERHOUSE & CO.  
*Chartered Accountants.*

### STATEMENT OF INCOME AND DEFICIT FOR THE YEAR ENDED DECEMBER 31, 1965

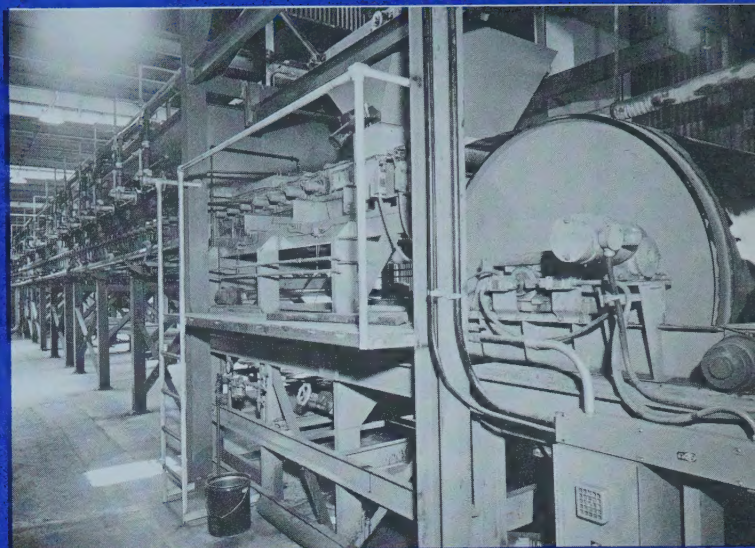
Statement II

Sales.....		\$19,250.00
Cost of sales.....		<u>16,500.00</u>
		2,750.00
Sundry revenue.....		<u>3,695.58</u>
		6,445.58
<b>EXPENSES:</b>		
Brochures and printing.....	\$ 705.08	
Legal fees.....	85.00	
Miscellaneous office expenses.....	140.33	
Salaries.....	7,478.53	
Stationery and supplies.....	58.64	
Taxes, fees and licenses.....	25.01	
Travelling.....	<u>674.42</u>	<u>9,167.01</u>
Loss for the year and deficit at December 31,		
1965—Statement I.....		<u><u>\$2,721.43</u></u>





New Rotary Type Jones Separator



Iron Powder Furnace

## 1965—ACHIEVEMENT OF CONS. QUEBEC SMELTING & REFINING LTD.

(NO PERSONAL LIABILITY)

1964 saw the initiation of growth and diversification of the company into industrial fields related to mining. Further progress was made in 1965; the company now has four major projects going, each of which is discussed individually:

### Ferro-Magnetics Ltd.

This subsidiary handles magnetic equipment and test programs on the Jones High Intensity Wet Magnetic Separator. Many test programs are underway. The Jones separator project is now self-supporting. The machine has been redesigned into a truly continuous rotary separator which is now receiving world-wide attention.

A commercial rotary separator is now in operation in Canada at the plant of our subsidiary, Ferrox Iron Ltd.

Two pilot plants are currently in operation in the United States, with a third pilot plant on iron ore shortly to be installed there. The large project for Climax Molybdenum Company, a subsidiary of American Metal Climax, is progressing favorably. Stearns-Roger Corporation of Denver, Colorado, has exclusive manufacturing and sales rights to the large separators in the Americas. They are now

engineering a range of sizes of the new rotary type separators from 3 to 50 tons per hour rated capacity.

Much ground work has been laid for the products of Rapid Magnetics Limited of England, for which Ferro-Magnetics Ltd. has exclusive North American sales representation, and considerable sales are expected this year.

### Ferrox Iron Ltd.

This subsidiary was formed to conduct research leading to production of ferrites. Ferrites are electronic ceramics with unique magnetic properties. The project was initiated in 1964 with the help of two Federal Government grants.

Ferrites have many uses in everyday life. The most common uses of hard ferrite are as permanent magnets in loud speakers, D.C. electric motors, electric switches, relays, generators, gauges, meters, holding devices, conveyors, etc. A familiar use is incorporation of magnetic ferrite in rubber for gaskets on refrigerator doors, etc.

In 1965 installation of equipment was completed and a new process was developed for the production of hard ferrite. The new techniques evolved have



resulted in a substantial reduction of production costs over conventional methods.

The plant at Prescott is now capable of producing two tons per day of ferrite powder. A world-wide sales program is currently in progress and orders have been received from companies in the United States, Italy, Germany and England. Considerable sales help is coming from the Federal Department of Trade and Commerce.

When the current sales program for our Prescott plant production is completed a much larger production plant will be undertaken. Ferrox Iron Ltd. has an excellent technical team that is probably unique in North America and holds great potential for the future in both research and production.

### Iron Powder Project

A joint venture has been undertaken with Canadian Petrofina Limited for production of iron powder. The usual high-grade iron ore concentrates for steel-making still contain 5% or more impurities. By using the Jones Separator the impurities can be reduced to a very low figure, resulting in an iron oxide of very high purity. Such iron oxide can be directly reduced with hydrogen to iron powder.

Iron powder is being used in ever increasing tonnages for the manufacture of pressed parts, such as gears, valves, etc. where shapes are complex and difficult to manufacture by standard machining methods. The two main costs in iron powder production are: 1) raw materials; and 2) hydrogen.

Our company has been carrying out test work on this project for some time. We have proved that a very high purity iron powder can be produced from our iron oxide. This is cheaper than other raw materials used for iron powder production. It is obvious that a cheap source of hydrogen is required. Hence, the joint venture with Canadian Petrofina Limited, where a source of hydrogen can be obtained in their oil refinery.

Test lots of powder have been made and evaluated by an independent United States' powder metallurgy test laboratory. Not only is our powder equal to the best that is currently marketed, but its ductility is over 30% greater and its tensile strength over 20% greater than the best iron powders now on the market. This means that our powder is a very superior product.

The joint venture called for the following work phases:

1. Proving of process and product evaluation;
2. Engineering of 50 tons per day production plant;
3. Building of 50 tons per day production plant.

Phase 1 has been achieved and phase 2 is under way. The plant will be built at the Montreal refinery of Canadian Petrofina Limited. Such a production plant will have an annual product valued at \$4,000,000. It is anticipated that we will follow the Montreal plant with exploitation of this development on a world-wide basis.

The iron powder market is one that is rapidly growing and expected to triple by 1970. The importance of this development is recognized by the participation of a major oil company in this project.

### Steel Project

Many processes have been developed for the direct reduction of iron ore. Most have failed economically for one main reason: the impurities in the ore prior to direct reduction still remain in the reduced product.

Our process removes the impurities prior to reduction, so that the reduced product is useable. We have shown that iron powder can be economically produced for melting stock for certain steel uses.

A study is being made of the possibility of building a direct reduction plant for steel making.





## **CONS. QUEBEC SMELTING & REFINING LTD.**

(NO PERSONAL LIABILITY)

### **PRESIDENT:**

R. P. Mills

### **VICE PRESIDENT GENERAL MANAGER:**

J. H. Morgan, Ph.D.

### **SECRETARY-TREASURER:**

J. O. Sabourin, F.C.I.S.

### **BOARD OF DIRECTORS:**

John McG. Home, Q.C.—Montreal, Que.

R. P. Mills—Montreal, Que.

J. H. Morgan, Ph.D.—Montreal, Que.

J. O. Sabourin, F.C.I.S.—Pointe Claire, Que.

J. Douglas Streit—Toronto, Ont.

## **SUBSIDIARIES**

### **FERROX IRON LTD.**

(NO PERSONAL LIABILITY)

#### **OFFICERS**

##### **PRESIDENT:**

R. P. Mills

##### **VICE-PRESIDENT:**

J. H. Morgan, Ph.D.

##### **MANAGING DIRECTOR:**

W. J. D. Stone, P.Eng.

##### **SECRETARY-TREASURER:**

J. O. Sabourin, F.C.I.S.

##### **DIRECTOR:**

John McG. Home, Q.C.

### **FERRO-MAGNETICS LTD.**

(NO PERSONAL LIABILITY)

#### **OFFICERS**

##### **PRESIDENT:**

R. P. Mills

##### **VICE-PRESIDENT:**

J. H. Morgan, Ph.D.

##### **MANAGING DIRECTOR:**

W. J. D. Stone, P.Eng.

##### **SECRETARY-TREASURER:**

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##### **DIRECTOR:**

John McG. Home, Q.C.